DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015736 Address: 333 Burma Road **Date Inspected:** 17-Jul-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Gao Zhi Chun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** Tower & OBG Components

Summary of Items Observed:

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY#10

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 25B located on North tower Lift-5 Grillage Assembly NSD1 – TL5 – 3B/F. Welder is identified as 052930. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – TC – U5b.

Weld joint # 29A located on North tower Lift-5 Grillage Assembly NSD1 – TL5 – 3B/F. Welder is identified as 052930. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – TC – U5b.

Witness of Ultrasonic Testing (UT)

This QA inspector Witnessed ABF Quality Control personnel performing UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The component and weld designations are identified as follows:

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SOUTH TOWER LIFT-5 SPLICE PLATE STIFFENER

SSD1 - SPSA5 - 1 - 1A/B

(See the attached photo)

ORTHOTROPIC BOX GIRDER (OBG) LIFT-13 AT BAY#10

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 109 located on Side Plate SP3083 – 001. Welder is identified as 052075. ZPMC Quality Control (QC) Inspector is identified as Yuan Hui Gang. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2132. (See attached photo)

Weld joint # 110 located on Side Plate SP3083 – 001. Welder is identified as 053869. ZPMC Quality Control (QC) Inspector is identified as Yuan Hui Gang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

BAY#11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 3B located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 12. Welder is identified as 046704. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint #4B located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 12. Welder is identified as 040614. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint # 2B located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 20. Welder is identified as 040667. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint # 1B located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 7. Welder is identified as 040656. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

ORTHOTROPIC BOX GIRDER (OBG) LIFT-13 AT BAY#11

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 009 located on Bike Path panel Assembly BK004I – 001. Welder is identified as 205649. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2231 - B - U2 - F.

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Witness of Magnetic Particle Testing (MT)

This QA inspector Witnessed 100% MT performed by ZPMC Quality Control personnel Mr. Li Chang Tao. The member is identified as Orthotropic Box Girder (OBG) Component. The component and weld designations are identified as follows:

LIFT-13 SIDE PLATE $SP3108 - 001 - 1 \sim 4$; 14; 15 (See the attached photo)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.







Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

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Inspected By: Kumar,Sandeep Quality Assurance Inspector **Reviewed By:** Clifford, William QA Reviewer